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Drawn: Bruce Page	Date: 4/1/04				
Approved: Chris Samios	Date: 4/1/04	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 4/14/04	Size: A	Dwg. #: <b>5961-291270-APP</b>	Rev: <b>A</b>	Sheet: 1            Of    2

**APPLIES TO:** Motorola/Nextel Model i30SX, i35S, i80S, i205, i305, i530, i730, and i733  
Iden Cellphones (Direct Connection)

**RADIO MODIFICATIONS:** None required.

**RADIO PROGRAMMING:** None required.

**RADIO CONTROLS:**

1. Turn the handset volume to maximum as indicated on the indicator bar.

**CABLING:**

ACU-1000 Interface Top Level Assembly	JPS P/N 5961-291270
ACU-1000 Interface Cable	JPS P/N 5961-291269-00
ACU-1000 Extension Cable	JPS P/N 5961-291266-00

ACU-T Interface Top Level Assembly	JPS P/N
ACU-T Interface Cable	JPS P/N
ACU-T Extension Cable	JPS P/N

**DSP PROGRAMMING:**

RX Level	5	-8dBm*
TX Level	6*	0dBm*
Squelch Type	VOX*	
COR Polarity	Active Low*	
High Frequency Equalizer	5	2dB Boost
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	4	800 ms
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

(\* Indicates Default Value)

**NOTES:** (The Falcon family of handsets includes Motorola/Nextel models i205, i305 AND i730.)

**Falcon handsets configured for Static/Fixed Nextel Group Connect communications:**

This configuration allows a Nextel interface to be used exclusively for Group Connect communications.

From the handset's Main Menu, select the following:

- 1) Settings
- 2) DC/GC Options
- 3) One-touch DC
- 4) Assigned Number

- 5) Enter a valid Talkgroup number preceded by the # symbol.

**Falcon handsets configured for Static/Fixed Nextel Direct Connect communications:**

This configuration allows a Nextel interface to be used exclusively for initiating Direct Connect communications. For example, this could be used as a dedicated talk path to an EOC dispatcher or another radio interoperability device.

From the handset's Main Menu, select the following:

- 1) Settings
- 2) DC/GC Option
- 3) One-touch DC
- 4) Assigned Number
- 5) Enter a Direct Connect number

**Falcon handsets configured for Dynamic Nextel Direct Connect communications:**

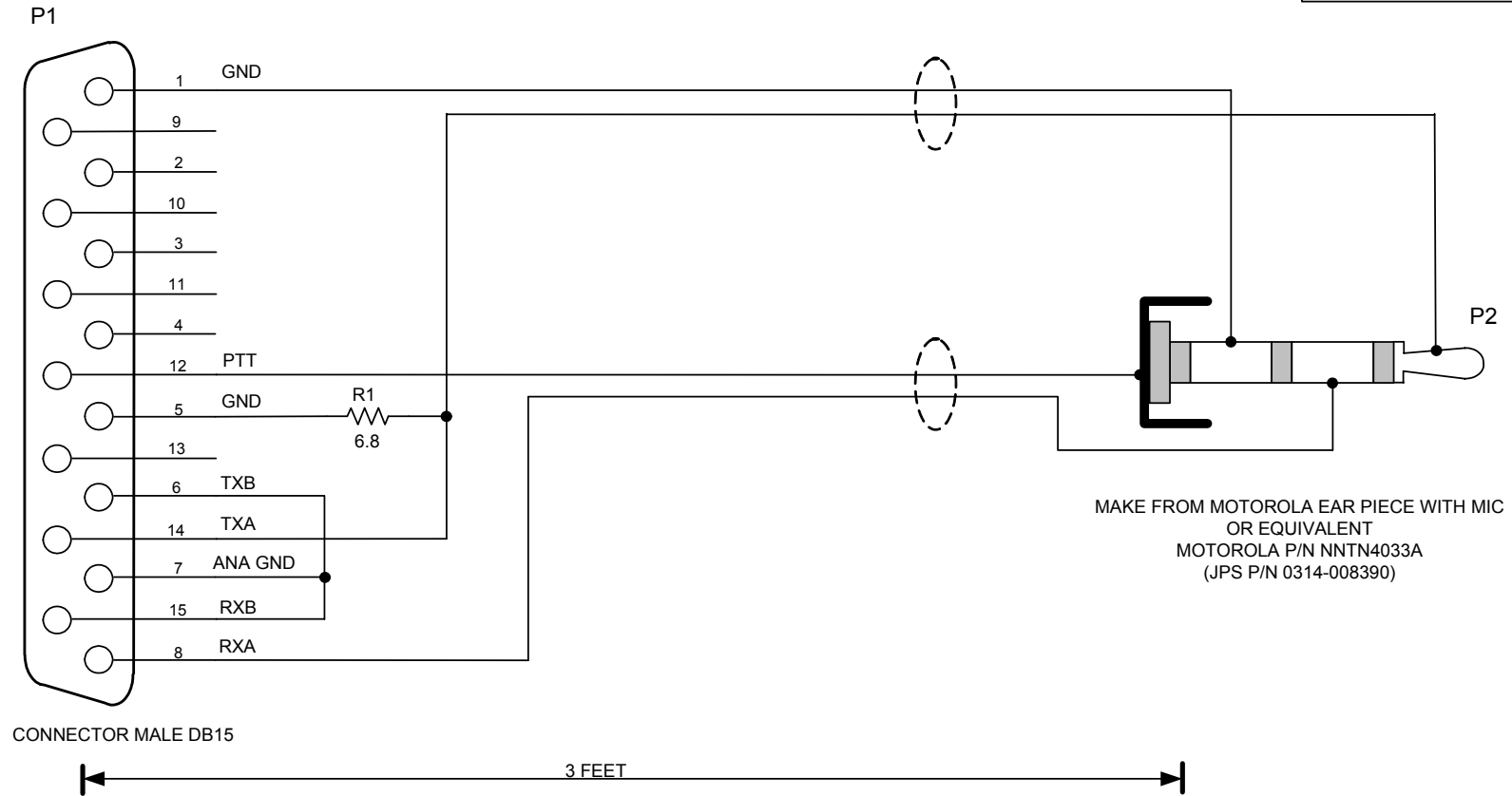
This configuration allows a Nextel handset to be used exclusively for receiving Nationwide Direct Connect calls. The DC call initiator is essentially permanently patched into the ACU-1000. It will require operator intervention to reset the handset to disconnect the Direct Connect link.

From the handset's Main Menu, select the following:

- 1) Settings
- 2) DC/GC Options
- 3) One-touch DC
- 4) Last Call

# PURCHASED PART

Rev	ECO	Date
A		



THIS CABLE IS PART OF THE 5961-291270 ASSEMBLY.  
THIS CABLE WORKS WITH 5961-291266 EXTENSION CABLE.

USED WITH:  
MOTOROLA/NEXTEL MODELS i30SX, i35S, i80S, i205, i305, i530, i730, & i733.

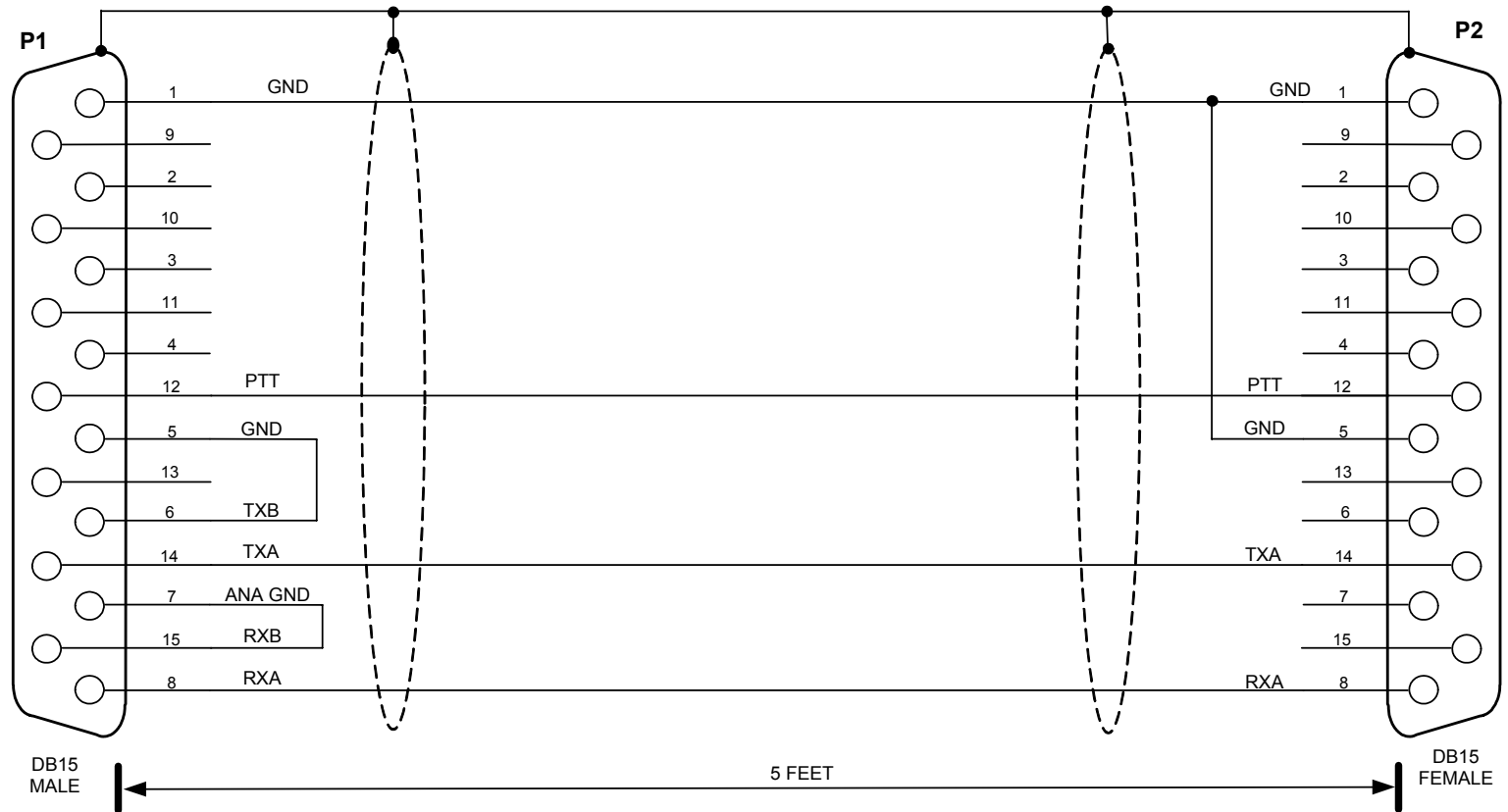
NOTES: FOR R1 USE JPS P/N 1820-068000

THE TWO CONDUCTORS ARE PAIRED IN  
SHEATHS AS SHOWN, TWO PLACES.

Designed By:	CTS	<b>Raytheon JPS Communications</b>		
Drawn By:	RBP	Title CABLE , ACU DIRECT INTERFACE TO NEXTEL i305		
Checked By:	JAC	Size A	Document Number <b>5961-291269-00</b>	Rev A1
		Issued Date	APRIL 1, 2004	Sheet <u>1</u> of <u>1</u>

# PURCHASED PART

Rev	ECO	Date
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NOTE: USE SHIELDED CABLE JPS P/N 0311-042410. CONNECT SHIELD DRAIN TO SHELL OF P1 AND SHELL OF P2. USE JACK SCREWS ON P2.

INCLUDED ON:  
 NEXTEL i90 DIRECT KIT JPS P/N 5961-291267  
 NEXTEL i305 DIRECT KIT JPS P/N 5961-291270  
 USED WITH:  
 ACU-1000 TO i90 DIRECT CABLE JPS P/N 5961-291263-00  
 ACU-1000 TO i305 DIRECT CABLE JPS P/N 5961-291269-00

Designed By: Chris Samios	<b>Raytheon JPS Communications</b>		
Drawn By: Bruce Page	Title Cable, ACU Extension to Nextel i90 Family Direct Connect		
Checked By: Chris Samios	Size A	Document Number <b>5961-291266-00</b>	Rev B
File Name: 5961-291266-00.VSD	Issued Date MARCH 9, 2004	Sheet <u>1</u> of <u>1</u>	